Structure and Trends of Wholesale Prices

despite the slackening of demand in some segments of the economy. The Bureau of Labor Statistics weekly index of wholesale prices averaged 110.5 (1947-49=100) in February 1954, slightly lower than the 110.8 figure for January and a partial offset to the 0.7 percent rise from December to January. The December-January advance was largely ascribable to a sharp rebound in livestock and live poultry prices which were continuing their recovery from the exceptionally low figures reached during the final quarter of 1953 when they averaged nearly one-fifth below the 1947-49 base period average. The spurt in raw coffee, tes, and cocoa prices also contributed substantially to the January rise. Apart from

Table 1.—Wholesale Commodity Prices, Indexes of Major Groups

[1947-40=100]

- Ltons	July	Jan.	Number of indexes shown			
			Total	Higher	Lower	Un- obanged
All commodities	110.0	110.8	1,641	583	482	676
Farm products	97. 0 100. 5	97.9 100.2	#3 178	41 87	4f) 63	7 30
All other than farm products and foods.	14.8	114.5	1.410	430	330	030
Textile products and appearel	87. 5 100. 0 111. 1 100. 2 124. 0 121. 1 115. 8	95.6 95.2 110.6 107.2 124.8 117.0 117.1	193 48 30 220 38 03 64	92 8 11 04 17 15 21	97 28 10 30 0 52 5	74 12 12 136 12 18
Metals and metal products	120.8 123.4	127.1 124.3	170 376	144	#	. 190
distributes. Nonmetallie minerals, signetural. Tobasco manufactures and bot-	134.7 210.4	115.2 [21.0	87 32	321 10	32 2	12 12
Hed boverages. Miscollanoous.	116.8 84.3	118.2 102.1	18 56	3 15	. 10 0	18 15

Source: Besie dain, U. S. Department of Labor, Dureau of Labor Statistics.

farm products and processed foods, there was little change from December to January in the other components of the index.

Stability through divergent movements

Underneath the surface, prices of individual commodities and commodity groups have shown divergent cross currents. Comparison of the January 1954 monthly index of all commodity prices with that of the preceding July reveals that out of the 1,641 commodities or minor groups for which separate prices indexes were published by the Bureau of Labor Statistics, 533 had risen during the 6 months' interval, 432 had fallen, and 676 were unchanged.

The stability of the all-commodity index in recent months was therefore the result of one large group remaining constant while the opposing movements of two other large groups cancelled out. Although the index of farm-product prices for January was identical with that for last July, the index had dipped appreciably during the interval and then recovered around the year-end with 41 items advancing in the half-year period, 45 registering declines, and 7 unchanged.

The processed foods index for January was 106.2 compared with 105.5 for the provious July with 57 quotations higher,

The processed foods index for January was 106.2 compared with 105.5 for the previous July with 57 quotations higher, 51 lower and 30 unchanged at the end of the interval. Among all commodities other than farm products and foods, a much larger proportion—639 out of 1,410—held constant with 435 higher, and 336 lower; the January index for this group at 114.5 was 0.3 index points below July 1953.

Notwithstanding the general stability, sharp changes occurred in the prices of individual commodities and minor groups in this period. Green coffee, cocoa beans, tea, animal edible fats and oils, inedible fats and oils, for example, were up 25 percent or more, while commodities showing substantial losses included hides and skins, leather, natural crude rubber, plywood, Douglas fir, and nonferrous wire and cable.

Pattern of price change

Despite the considerable divergences of price changes with some hundreds of commodities moving up and hundreds of others going down, the changes were not altogether aimless. Upon examination, a fairly definite pattern of changes stands forth. One aspect of this pattern can be seen in table I from the preponderance of upward or downward movement on the part of the individual items composing the various price groups.

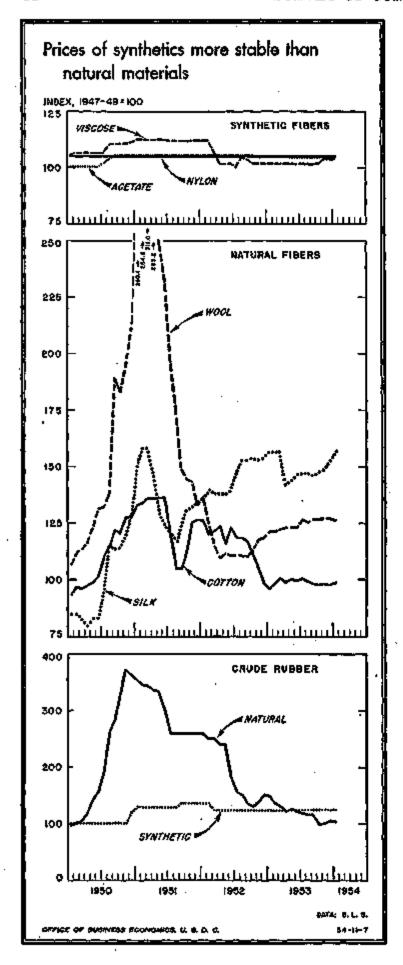
price groups.

The greater than average weakness of textile and apparel prices, for instance, is apparent not only from the 2 percent drop over the period in the group index but also from the fact that 4 to 5 individual items declined in price for each one that rose. Within the group, the above-average weakness of cotton products was indicated by the fact that out of 57 items priced, 49 fell and only 1 rose. Out of 82 items of apparel priced, 28 fell and 10 moved up. On the other hand, out of 375 individual machinery and motive product prices, 144 rose to 41 that fell, while among the 33 individual nonmetallic structural minerals quoted 19 rose as only 2 declined.

Other aspects of the commodity price pattern which will be outlined in the following pages are: the relative weakness of raw materials prices compared to finished products; the relative firmness of nonagricultural products compared to those of agricultural origin; and the relative firmness of goods destined chiefly for defense or producer uses as against those going chiefly to consumers.

^{1.} The Bureau of Lober Statistics index is a composite of about 5,000 commedity price quotations but the number of separate price or price indexes published in any month; it isses than that. Some of the farm products are seasonal and are not quoted in all months while smoot the industrial products there are instances such as photographic materials and motor vehicles where the individual prices are not shown separately but represented by the maker group index computed from them.

NOTE.—THE AUTHOR IS CHIEF OF THE CURRENT BUSINESS ANALYSIS DIVISION OF THE OFFICE OF BUSINESS ECONOMICS. MR. STUART J. WINSTON ASSISTED IN THE STATISTICAL COMPUTATIONS.



Recent adjustments have affected prices of raw materials and semimanufactures more than prices of largely finished products (see chart). The greater sensitivity of raw materials as compared with finished products to changes in economic conditions has often been observed and is regarded as a normal feature of cyclical changes. The difference stems, of course, from the differences between the two types of markets.

New materials versus finished products

Prices in raw materials markets are more sensitive because they bring together from many parts of the world demands for, and supplies of, materials suitable for a wide variety of uses. Furthermore, since most raw materials are staple, reasonably durable commodities that can be stored, they are also subject to wide variations in inventory or stockpile demand. Stocks of raw materials in hands of producers, in transit and in hands of industrial consumers commonly bulk larger relative to current consumption than is the case for manufactured products.

Finally, because most raw materials are of agricultural origin, it is more difficult to adjust their current supplies to current demand than in the case of manufactured products; hence, raw materials prices are more often depressed by surpluses or hoisted by relative scarcities, as currently is the case for coffee, tea, and cocoa.

As the material passes through each stage of the industrial sequence, the sellers and the buyers are different. Every act of processing gives the material a different form utility; each transport-over distance gives it a different place utility; and in each successive stage the time period covered by effective supply-demand factors is shorter and ordinately less uncertain. Each time the product is sold after having value added to it, it is therefore in a different market.

Generally the potential area of domand becomes more restricted in succeeding markets as the increased processing of the materials aims it for a more specific use and therefore a narrower area of demand. Finally, since the cost of raw materials is ordinarily a fairly small portion of the cost of the finished products into which they enter, substantial percentage changes in raw materials prices are translated—other costs remaining unchanged—into much smaller percentage changes in final product prices.

Natural versus synthetic materials

The striking differences in price behavior between prices of natural materials and prices of the synthetic materials that compete with them are a form of the raw materials fabricated products contrast. These differences are largely due to two factors: first, the synthetics have had more processing than the natural materials; and, second, the natural materials—especially if they are of agricultural origin—are produced under quite different conditions of supply.

This second factor can be illustrated by comparing the conditions governing the supply of, for example, cotton and rayon. As a field crop, the supply of domestic cotton is subject to all of the decisions made with regard to the planting, care, harvesting, and marketing of cotton by several hundred thousand independent farmers as well as being subject to the uncertainties of the weather and of plant diseases and insect damage—not to mention the possibility of Government controls. The supply of domestic rayon, on the other hand, comes from a comparatively small number of

manufacturing establishments; the 1947 Census reported 38 establishments producing synthetic fibers. Hence the current supply of rayon can obviously be much more readily adjusted to current demand than cotton. From the standpoint of a more prompt and accurate adjustment of supply to demand, therefore, the synthetic fiber should be, and is, more stable in price than the plant fiber (see chart, p. 17).

The greater price stability of the synthetic material is also due in part to the fact that it has had more value added to it by manufacture than the natural material. Thus the only processing that raw cotton has had prior to being mar-

Table 2.—Change in All Wholesele Commodity Prices January to July 1963 and July 1953 to January 1954

	Wholesale prices		Contributions to charge in	
Commodity index group	July 1962 as	Tanımry 1956	oil-commod- ity indox t	
1	percent of January 1963	es percent of July 1953	January 1963 to Japuary 1964	
All wholesale commodities		90.9	0.90	
Att agricultural products	96.9 103.1	100. 2 99. 7	-, 87 1, 27	
All longely manufactured products Agricultural Nonogricultural	99.3	100. 2 100. 5 100. 1	1.20 04 1.24	
Afti raw or saminanniactured products Agricultured Nonopricultural	100.0 91.3 101.8	08.9 89.7 89.1	- 30 - 30	
Manufactures: Metal products Brok and power Poeds and boverages Birsotural apamolalite minerals Poesst products Chemicals Agricultural nonfoods	204.7 500.2 104.0 106.4 100.3	100. 4 08. 8 100. 7 100. 5 100. 2 100. 2	95 417 00 05 042 100	
Raw or sommanutocianed products: Obemisels Occurred incredited: Minoral tuels Agricultural manipods. Forest products Motals Agricultural foods Ciber.	100.3 99.6 100.0 102.6 88.0	89, 2 161, 2 160, 6 08, 6 + 97, 1 98, 9 170, 1	.12 .68 .03 04 19 20	

Unit is 1 percent in all commodity lodge. Contribution of each group is the change in its index weighted according to its rabelies importance.

keted is ginning and baling while its competitor, synthetic stable fiber, is the end product of a series of manufacturing processes that began with cotton linters, pulpwood, and various chemicals. The greater value added by manufacture in the case of the synthetic staple fiber means that payment to the primary producers constitutes a smaller portion of the market price of the fiber as compared to cotton, while the proportion going to factory labor, fuel, transportation, overhead, and manufacturers' profits form a larger portion.

larger portion.

The greater price stability of synthetics as compared to natural materials is evident from the chart. The extreme divergence of crude natural rubber from crude synthetic rubber in 1950 and 1951 was due, in addition to the elements just outlined, to the fact that it is entirely imported. Hence the amount available to American users and the price are settled in a world market and therefore subject to the greater uncertainties to which foreign supplies from distant sources are subject, especially in times of conflict.

In all cases illustrated by the chart, the natural materials have fluctuated more widely than the synthetics, silk yarns more than nylon yarns, cotton more than rayon both as

fibers and also as yarns,

Scrap prices lower.

Prices of scrap materials are related to prices of new raw materials. When various types of goods have been used up to the point of being junked, the resulting scrap materials may be recycled back into the productive process and, to a certain extent, they then become competitive with new raw materials.

Prices of scrap materials are ordinarily much more volatile than prices of new materials because of quite different conditions of supply. The cost of the materials appearing in the scrap markets consists of two major elements: (a) the cost to the dealers and others handling the scrap for collection, processing—if any—and marketing plus their profit margin, and (b) the purchase price paid to the owners of the goods being junked.

Prices received by the owners of the goods being junked vary widely depending upon industrial demand, while the prices at which scrap is marketed by dealers, brokers, or sellers of industrial scrap fluctuates considerably more than the corresponding new materials. When the scrap undersells new materials by a sufficiently wide margin producers that can substitute scrap for new materials will tend to use relatively more of it and thus put pressure on the prices of new materials.

Comparative percentage changes in the prices of some new and scrap materials to January 1954 from previous years are as follows:

	Parcent		
Ferrous metals: Pig iron and ferro-alloys Iron and steel scrap	Junuary 1950 to Junuary 1954 24 — 4	January 1965 to January 1964 2 -29	
Aluminum: Ingots, virgin Scrap (average 6 grades)	26 18	17	
Copper: Electrolytic ingots	63 80	23 19	
Lead: Pig, desilverized Scrap (average 2 and 3 grades)	. 11 . 8		
Zino: Prime western Scrap (average 4 grades)	_23	-22 -36	
Paper materials: Woodpulp Waste paper	21 ~7	_9 _9	

The importance of scrap in the metal industries is indicated by the fact that in recent years scrap has constituted from 45 to 48 percent of the input into steelmaking while in the nonferrous metal industries output of secondary metals (i. e., metals made from scrap) has ranged from one-fourth to one-third of the total.

Significance of cheaper raw materials

The downward adjustment of raw material prices is one factor tending to make possible some reduction in the prices of finished products. The relative contributions of the major commodity price groups to the change in the general wholesale price level from January 1953 to July 1953 and from July 1953 to January 1954 are shown in table 2. It will be seen that in the second of these periods, the prices of all raw or semimanufactured materials moved to depress

Source: Basin data from Bureau of Labor Statistics, U. S. Department of Labor; computations by Office of Business Economics.

the price level by 0.3 percent while the prices of all manufactured products were lifting it by 0.2 percent.2

Agricultural versus nonagricultural prices .

The influences upon price level movements of agricultural and nonagricultural products have been reversed during the past year. From January to July 1953, the rise of one index point in all wholesale prices was due to a rise of nonagricultural product prices only partly offset by a decline of agricultural prices. In the 6 months from last July to last January, bowever, the fractional easing off in the allcommodity price index was ascribable to a minor decline in prices of nonagricultural products which slightly more than offset a minor rise in prices of agricultural products. For the first 8 months of 1953, lower prices of raw materials

were entirely accounted for by declining agricultural materials as nonagricultural raw materials continued to move up along with manufactured products. Beginning with September, however, the index of nonagricultural raw materials prices began to ease off; its decline for the half year from July to last January surpassed that of agricultural raw materials which recovered substantially between November

and January.

Among agricultural raw materials, food products were slightly weaker than the nonfoods in the year clapsing between January 1953 and January 1954. An index of raw foods based on Bureau of Labor Statistics data stood in January 2.1 percent lower than in January 1953, while an index of raw agricultural nonfoods was off 1.5 percent. Raw foods were weakest during the first 10 months of the period, recovering substantially in December and January. During much of 1953, livestock and live poultry prices were down substantially, but they recovered charply in the latest months.

Agricultural nonfoods

The relatively stronger trend of raw agricultural nonfoods as compared with the foods was largely accounted for by the firmness of plant and animal fibers and leaf tobacco prices as most other components except inedible fats and oils stood lower in January than in January 1953. The slight rise during 1953 in plant and animal fiber prices was due to Government support of domestic cotton and wool and to higher prices of such imported fibers as wool and jute. Leaf tobacco prices were also supported and relatively unchanged in January from the previous January.

Most of the decline in the nonfood price index was due to crude natural rubber, which was approximately 30 percent lower in January than in the opening month of 1953, in continuation of the fall from the March 1951 speculative peak. However, hides and skins prices, traditionally a bellwether among sensitive commodities, also contributed substantially to the decline with a loss of 9 percent during the year. Virtually all of the drop in hides and skins prices occurred in the half year following July 1953 and it accounted for most of the decline in the raw agricultural nonfoods index for that period.

At the beginning of 1954, agricultural raw materials as a group had lost all of the price rise recorded during 1950 and 1951. In January raw lood prices stood 4 percent above the June 1950 level while raw agricultural nonfood prices

were 6 percent below it.

Agricultural manufactures

Prices of products manufactured from agricultural materials have hold up better than the raw materials prices. Processed agricultural foods and beverages prices, having registered moderate fluctuations largely due to seasonal influences, opened 1964 less than 1 percent above where they had been 12 months earlier. But while raw foods prices had lest the major portion of their rise from June 1950 to the spring of 1951, prices of processed foods retained two-thirds. of the earlier gain, standing in January 10 percent above the June 1950 average.

Prices of products manufactured from agricultural nonfood materials have not held up so well as the foods, since the January 1954 index was only 4 percent above June 1953. During the past year, these manufactured nonfoods and the raw products entering into their production have each declined about 2 percent. Among the manufactured nonfoods, most of which showed losses for the year, cigarettes registered a substantial rise while cotton manufactures and manufactured animal feeds accounted for almost all of the

group's decline in the wholesale markets.

Nonagricultural materials

Nonagricultural materials and the products made from them, governed by quite different conditions of supply and also of demand from those originating in agriculture, showed considerably more strength in wholesale markets in the past year with a 2 percent rise from January to January. relatively greater firmness was, however, confined to the January-August 1953 period.

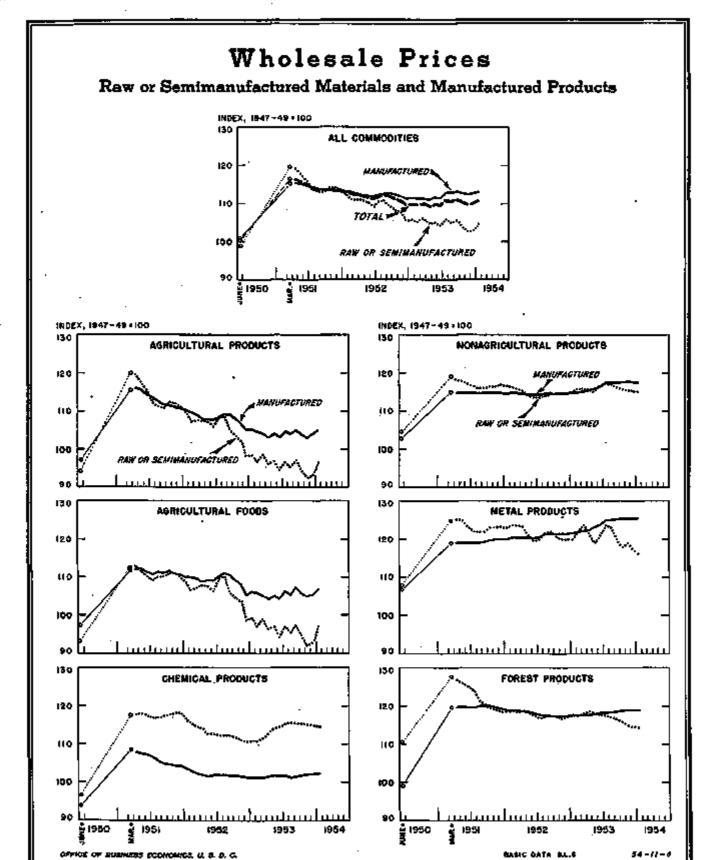
Raw materials in this category continued rising for 8 months in 1953 and, notwithstanding their decline in the past 5 months, stood in January only fractionally below January 1953 and 10 percent higher than in June 1950. Fabricated products prices edged steadily upward until November, then eased off .2 percent in December and January when they were about 2 percent above January In the opening month of the year, the prices of these manufactured products stood one-seventh above the June 1950 level and they were also higher on the average than prices quoted in the spring of 1951 when the all-wholesale commodity price index reached its peak.

The greater firmness of nonagricultural prices in recent months compared with prices of agricultural products is ascribable at least in part to the prompt adjustment of supply to changes in demand. Thus with manufacturers' sales in , January 10 percent below their midyear figures, industrial production schedules were correspondingly trimmed back.

The outstanding firmness of products manufactured from nonagricultural materials in recent months was manifested in all major groups—metals, chemicals, forest products, and processed fuels and power. Manufactured metals and forest products are instances where the January 1954 prices of finished products were substantially higher relative to June 1950 than their raw materials. The reverse is true in the cases of fuels and chemicals where the raw materials in January 1954 were considerably higher relative to June 1950 prices than prices of the finished products. With regard to the fuels group, however, it should be noted that the most important one, coal, dominates the raw materials index but its finished product, coke, exerts only a small influence in the manufactured products index.8

^{2.} The carefully defined prices employed in the construction of the wholesale price index do not, of course, show the exact net cost of goods to the buyer. Abscription of transpertation charges, bidden discounts, alterations in terms of payment, and changes in other types of appenial concessions, all of which help to determine the actual cost of goods sold, are purposely and specifically excluded from the price quotations entering into the wholesale price index. When substanting received age occurring in supply-demand conditions, they are community reflected scores in these and other special concessions before they affect quoted list price. At such times, the wholesale price index will be superwint in reflecting changes in not cost of communities to buyers whom prices are rising as well as when they are declining,

^{3.} Although different weights may give the price of a raw material relative influence in the raw insterior index that is different from the influence of the products fabricated from it in the samulatoured products price index. The significant differences in the movements of the raw naturally price indexes from those of the manufactured products price indexes from those of the manufactured products price indexes from those of the manufactured products price indexes are very largely the reflection of price rather than weight differences. This is easily demonstrated by conjuring the prices of an embeatable framework of individual cow materials with prices of various products fabricated from them.



In contrast to the firmness of the prices of finished products in recent months, prices of all major groups of nonagricultural raw materials except fuels have been edging downward since the late summer of 1953. With coal prices steady at their highest postwar figures, fractional declines in liquid fuels have scarcely budged the raw fuels price index.

Metal prices

Among the raw metals, the major adjustment has occurred in scrap or secondary metals. However, substantially lower quotations were recorded for such primary nonferrous metals as tin, copper, lead, and zine following resumption of free

trading in the London market.

Despite the easing of raw metal prices, prices of fabricated metal products continued to creep higher as recently as in January. The machinery and motive products group price index, comprising the most important fabricated metal products, edged upward in every month, more than offsetting very minor downward adjustments in finished from and steel, nonferrous metal products such as wire and cable, fabricated structural metals, plumbing equipment, household appliances, radios, television sets, phonographs, watches, and clocks.

Prices of metal manufactures have remained firm while demand has declined, partly because output was quickly adjusted downward. Sales by manufacturers of fabricated metals, machinery, and transportation equipment in January were 11 percent lower than in July, while fabricated metals and metal products output as measured by the Federal

Reserve index was off 9 percent.

Forest products

Manufactured forest product prices rose to the end of the year while prices of raw materials have declined since April 1953. The movement of lumber prices dominated the raw materials index with woodpulp and waste paper in secondary roles, while prices of paper and paperboard products largely governed the finished goods price index with millwork, plywood, and wood furniture secondary. Hence the decline in raw forest products prices has been chiefly due to lower quotations for lumber although waste paper dropped substantially. Downward adjustments in prices of plywood and very small reductions in prices of millwork and wood furniture among the finished products were more than offset by firm and rising prices of most paper and paperboard products.

Chemicals

Since late summer of 1953, prices of raw or semimanufactured chemicals, easing off, have diverged from manufactured chemical products which have edged upward. The downward movement of raw or semimanufactured chemicals prices is entirely due to industrial chemicals. Among the manufactured products, only synthetic textiles were adjusted downward while a broad but diverse group of other chemical products held firm or continued gradually higher to the yearend. Among these were soaps and synthetic detergents, plastics, and propared paints.

Shifts in price relationships

As a result of the upheaval and subsequent adjustment of prices associated with the Korean period of defense buildup and the accompanying investment boom, interrelationships between price groups are currently somewhat different from what they had been previously. It is convenient to use June 1950 as the starting point for measuring these shifts as the Bureau of Labor Statistics index of all wholesale prices was 100.2 in that month (1947-49=100) after recovering moderately from somewhat lower levels during the recession of 1949. The subsequent period marked the second phase of the postwar price advance, the first having ended with the 1948-49 correction.

Measurement of the changes from this particular month carries no implication that the price relationships at that time were in any sense proper or balanced or the contrary. It is simply a convenient starting point in the pre-Korean period from which to measure.

Major results of this second phase of the postwar price rise are two: (a) as of January 1954, the wholesale price level was one-tenth above that of June 1950, and (b) substantial shifts have occurred in the structure of wholesale prices as a consequence of divergent movements during the interval of

various commodities and groups.

Outstanding shift between June 1950 and January 1954 has been the 5 percent loss of raw material values relative to the prices of all wholesale commodities and the concomitant gain of nearly 2 percent in the relative value of manufactured products (see first chart). This shift manifests itself currently in a widening spread between prices of raw or semimanufactured materials and prices of the products made from 🔍

All groups of raw or semimanufactured materials, except chemicals which appreciated sharply, have depreciated refative to the general price level in varying degrees between these two dates. Agricultural materials experienced the largest decline with the nonfoods dropping 13 percent relative to the general price level as against 8 percent for the foods. Semimanufactured forest products lost 6 percent compared to all wholesale prices but still retained 4 percent of their earlier appreciation from the 1947-49 base period. The relative decline of raw or semimanufactured fuels and metals was only nominal,

Shifts among manufactures

Although the index of prices of all manufactures rose slightly relative to all wholesale prices between June 1950 and January 1954, the major component groups diverged widely. Three major groups of manufactures appreciated substantially; forest products rose 9 percent, metal manufactures including machinery and vehicles, 7 percent and nonmetallic structural mineral manufactures 6 percent relative to the general level. Prices of the following groups of manufactures fell relative to the general price level during the interval; chemicals, off only nominally; fuels and power, down 3 percent; manufactured agricultural products, foods off 2 percent and nonfoods losing 5 percent; and apparel which declined 3 percent in this period and a total of 11 percent since the 1947-49 base period.

The most common pattern running through these various shifts indicates that the necessities of the period favored the appreciation of those commodities, largely durables, required for defense and investment purposes. Commodities destined chiefly for consumers and subject to less stringent conditions of supply and demand consequently did not match the rise in the general price level. Thus metals and metal products moved up relative to all commodities while foods, textiles and apparel lost ground; lumber and wood products and nonmetallic structural minerals gained while agricultural

nonfoods declined.

The pattern is by no means perfect; prices of some durables, plywood for example, have lagged relatively while prices of some nondurables have been quite strong. But the broad trend is evident from the change in the ratios of the following special price indexes to the index of all wholesale prices (1947-49=100) in June 1950 and January 1954.

•	Purables: lumber, concrete ingredients	All commodity pri June 1950	ices=160 pércent January 1864
	and all metals	109. 6	1 0 5. O
	All other new or somimanufactured materials	95. 8	91. 7
	Manufactures: Durables: millwork, plywood, wood furniture, all motal products, all		
,	nonmetallic structural minorale	106, 5 97, 0	112. 0 95. 5

Although durable raw materials were still above the allcommodity price level in January 1954, the spread between them and all other raw materials had not increased in comparison to the earlier period. Among manufactures, however, prices of durables in January 1954 showed a substantially increased margin relative to prices of nondurables as compared to June 1950.

Another espect of price shifts was obtained by singling out two special groups of commodities; those half again as high or higher than in the 1947-49 base period and those one-third or more below base period levels. There were 62 individual items in January priced 50 percent or more above the 1947-49 average prices. These included a variety of commodities ranging from 84 metals or metal products to

green coffee and foreign apparel wool.

Theze were 50 commodities or minor groups priced onethird or more below the 1947-49 average prices. One prominent group consisted of 10 fats and oils, including both edible and inedible kinds. Another comprised 14 chemicals including 10 drugs and pharmaceutical materials. A textile group included burlap and one type of cotton goods in addition to women's nylon hosiery and 7 other synthetic textile products. There were 6 agricultural foods. Among a group of agricultural nonfood products was the hides and skins group index pulled down by low quotations of all 6 grades of cattle and calf skins and 2 kinds of goat skins. Lowest of all price indexes—and illustrative of what happens in the case of newly developed products—were penicillin, 10 percent and streptomycin, 11 percent of the 1947-49 average prices.

Generalizations as to the significance of these shifts would have to be made with considerable caution. Price shifts relative to the general price level might, for instance, be only temporary and might be reversed at some future time. That could easily be the case for agricultural commodities especially coffee and cocos—which have appreciated relative to the general price level because of current shortages or those others which have fallen because of existing surpluses, such as fats and oils. The metals might not retain their high vantage point relative to the price level in a future period when personal consumption absorbed a considerably larger share of the national product and defense combined with

fixed investment a smaller share.

Furthermore, lowering of a given commodity's price relative to the general level of prices could occur for quite different reasons. For an established product, it could stem from a decline in demand relative to a fairly static supply situation as in the case of most textiles and apparel; or, in the case of a new and fast-growing industry it could result from a rapidly expanding productive capacity progressively

reducing cost ahead of rising demand as in the case of penicillin and streptomycin and, on a less dramatic scale, synthetic fibers and textiles.

Technical Note

The indexes of raw or semimanufactured materials and manufactured products used in this study were obtained by regrouping various components of the Bureau of Labor Statistics index of wholesale commodity prices. All components were used, each one weighted by the same weights employed by the Bureau of Labor Statistics.

The components of the indexes of raw or semimanufactured ma-

terials and of manufactured products as regrouped by the Office of Business Economics are as follows:

Agricultural products

Foods: Row.—Fruits and vegetables; grains; livestock and live poultry; fluid milk; eggs; peanuts; cottonseed; soybeans; raw coffee, tea and cooos beens.

Processed.—Processed foods group less fish; alcoholic beverages;

non-alcoholic beverages

Nonfoods: Raw.—Plant and animal fibers; hay; hayseeds; flaxseed; copra; leaf tobacco; hides and skins; incdible fats and oils; natural œude rubber. Manufactured.—Cotton, wool, silk and other textile products; leather; footwear and other leather products; tires, tubes and other rubber products (with ½ weight); eighreites, eights and other tobacco products; and man-

ufactured animal feeds.

Forest products

Raw or semimanufactured.—Lumber, woodpulp and waste paper.

Manufactured.—Miliwork; plywood; paper; paperboard; converted paper and paperboard products; building paper and board; wood furniture, household and commercial.

Chemicals

Raw or somimunufactured.—Synthetic and realistmed crude rubber; synthetic fibers; industrial chemicals; paint materials; and fertilizer materiols.

Manufactured.—Synthetic yarns, fabrics and kuit goods; prepared paints; drugs, pharmaceuticals, cosmetics and perfumes; mixed fertilizers; other chemical products; tires, tubes and other rubber products. uots (with 1/2 weight).

Raw or semimanufactured.—Coal, gas, potroleum and natural gasolina. Manufactured.-Coke; electricity; gasoline, koroseno, fuel olla; and lubricants.

Metals

Row or semimanufactured.—Iron ore; scrap; plg iron and forro-alloys; semifinished steel; testings and forgings; nonferrous primary and secondary metals and scrap.

Manufactured.—Finished iron and steel products, including structured metals; nonferrous metal products; metal products and equipment such as containers, hardware, plumbing, heating, furniture, appliances, including radios and TV sets, silverware, outlery, watches and clocks, machinery and motive products.

Nonmetallic minerals, structural

Row or sominanufactured.—Concrete ingredients. Manufactured.—Class products; concrete products; clay products; gyp-sum products; vitroous china plumbing equipment; asphalt roofing and other nonmetallic minerals.

Included in totals but not shown separately

Raw.—Unprocessed fin fish.

Manufactured.—Processed fish; apparel; upholstered furniture, bedding, and floor covering; toys; sporting and athletic goods; nations and accessorios; jeweiry and photographic equipment; and other miscellaneous products.